

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/505,168	08/30/2004	Shigeru Kasai	258107US3PCT	6673
OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET			EXAMINER	
			MOORE, KARLA A	
ALEXANDRIA, VA 22314			ART UNIT	PAPER NUMBER
			1792	
			NOTIFICATION DATE	DELIVERY MODE
			01/09/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com oblonpat@oblon.com jgardner@oblon.com

	Application No.	Applicant(s)
		KASAI ET AL.
Office Action Summary	10/505,168 Examiner	Art Unit
,		1792
The MAILING DATE of this communication a	Karla Moore	<u> </u>
Period for Reply	ppears on the sover sheet with the s	
A SHORTENED STATUTORY PERIOD FOR REP WHICHEVER IS LONGER, FROM THE MAILING - Extensions of time may be available under the provisions of 37 CFR after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory perior - Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mail earned patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMUNICATION 1.136(a). In no event, however, may a reply be tind d will apply and will expire SIX (6) MONTHS from the cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).
Status		
 1) Responsive to communication(s) filed on <u>15</u> 2a) This action is FINAL. 2b) Th 3) Since this application is in condition for allow closed in accordance with the practice under 	nis action is non-final. vance except for formal matters, pro	
Disposition of Claims		
4) ⊠ Claim(s) 1-16 is/are pending in the application 4a) Of the above claim(s) is/are withdrest is/are allowed. 5) □ Claim(s) is/are allowed. 6) ⊠ Claim(s) 1-16 is/are rejected. 7) □ Claim(s) is/are objected to. 8) □ Claim(s) are subject to restriction and	awn from consideration.	
Application Papers		
9) The specification is objected to by the Examin 10) The drawing(s) filed on 30 August 2004 is/are Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the	e: a) accepted or b) objected ne drawing(s) be held in abeyance. Section is required if the drawing(s) is ob	e 37 CFR 1.85(a). jected to. See 37 CFR 1.121(d).
Priority under 35 U.S.C. § 119		
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority docume 2. Certified copies of the priority docume 3. Copies of the certified copies of the priority application from the International Bure * See the attached detailed Office action for a list	nts have been received. nts have been received in Applicati iority documents have been receive eau (PCT Rule 17.2(a)).	on No ed in this National Stage
Attachment(s) 1) Notice of References Cited (PTO-892)	4) 🔲 Interview Summary	
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	Paper No(s)/Mail D 5) Notice of Informal F 6) Other:	ate

10/505,168 Art Unit: 1792

DETAILED ACTION

Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
- 3. Claims 1-4, 8-12 and 14-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese Patent No. 10-313041 Tsubone et al.
- 4. Tsubone et al. disclose a treatment subject receiving vessel body substantially as claimed in Figures 1 and 2, comprising: a vessel main body (2/4), for supporting a plurality of treatment subjects; a joint port (immediately left of 5a in Figure 2) formed at one side surface of the vessel main body and communicating with an interior of the vessel main body and communicating with an interior of the vessel main body; and an openable and closeable gate valve (5a) installed at the joint port; wherein the vessel main body becomes sealed airtight when the gate valve is closed.

10/505,168 Art Unit: 1792

- 4. However, Tsubone et al. fail to disclose an openable and closeable exhaust port disposed in the vessel main body.
- 5. However, Tsubone et al. do disclose that by providing individual structures of the apparatus with individual atmosphere control means (i.e. exhaust means and inert gas source means) cross-contamination can be prevented and therefore the maintainability of the structures is enhanced (JPO abstract and paragraphs 13-15 of translation).
- 6. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have provided individual atmosphere control means for each of the structures of the apparatus in order to prevent cross contamination and therefore the maintainability of the structures is enhanced as taught by Tsubone et al.
- 7. With respect to claim 2, see above.
- 8. With respect to claim 3, the treatment subject receiving vessel body may be a part of a treating system further comprising: a first transport auxiliary chamber (7 adjacent 3a) having at one side thereof a vessel body port (to right of 5b) to which the treatment subject receiving vessel body is connected and having therein a transport arm (16) for transporting a treatment subject; a second transport auxiliary chamber (7 adjacent 3b) having at one side thereof a vessel body port to which the treatment subject receiving vessel body port is connected and having therein a transport arm mechanism (16) for transporting the treatment subject; and a vessel body transfer unit (between a and 3a-3c, see arrows) for transporting the treatment subject receiving vessel body between the first transport auxiliary chamber and the second transport auxiliary chamber. Further, it is noted that it would have been obvious to one of ordinary skill in the art to provide the atmosphere control mechanism at all of the transport chambers for the reason(s) provided above.

10/505,168 Art Unit: 1792

- 9. With respect to claim 4, a processing chamber (3a-c) for performing a process on the treatment subject, and wherein the second transport auxiliary chamber is located such that another side thereof is adjacent to the processing chamber and the transport arm mechanism therein is capable of transporting the treatment subject between the processing chamber and the treatment subject receiving vessel body.
- 10. With respect to claim 8, the vessel body port of the first transport auxiliary chamber is provided with an openable and closable gate valve (5c), and the vessel body port of the second transport auxiliary chamber is also provided with an openable and closable gate valve (5c).
- 11. With respect to claim 9, the first transport auxiliary chamber is provided with a gas exhaust line (via the processing chamber); the second transport auxiliary chamber is also provided with a gas exhaust line (via the processing chamber), a port gas supply line (containing 14 and 15) and a port gas exhaust line (containing 12 and 13) are installed outside the gate valve of the vessel body port of the first transport auxiliary chamber; and a port gas supply line (containing 14 and 15) and a port gas exhaust line (containing 12 and 13) are also installed outside the gate valve of the vessel body port of the second transport auxiliary chamber.
- 12. With respect to claim 10, the first transport auxiliary chamber is provided with a gas supply line and the second transport auxiliary chamber is also provided with a gas supply line (via the processing chamber).
- 13. With respect to claim 11, see above description of the atmosphere control mechanism described in Tsubone.
- 14. With respect to claims 12 and 16, a positioning projection mechanism (11) is formed on the bottom surface of the vessel main body. Tsubone disclose means for positioning and moving the vessel main body as described above. However, it would be obvious to one of

10/505,168 Art Unit: 1792

ordinary skill in the art exercising ordinary creativity, common sense and logic that other means for positioning a moving the vessel main body are possible. The courts have ruled that an express suggestion to substitute one equivalent component or process for another is not necessary to render such substitution obvious. In re Fout, 675 F.2d 297, 213 USPQ 532 (CCPA 1982).

- 15. With respect to claim 14, the vessel body is capable of being part of a treating system.
- 16. With respect to claims 15, which is drawn solely to an intended use of the apparatus, the courts have ruled that claims directed to apparatus must be distinguished from the prior art in terms of structure rather than function. In re Danly, 263 F.2d 844, 847, 120 USPQ 528, 531 (CCPA 1959). The courts have also ruled that a claim containing a "recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus" if the prior art apparatus teaches all the structural limitations of the claim. Ex parte Masham, 2 USPQ2d 1647 (Bd. Pat. App. & Inter. 1987).
- 17. Claims 5-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsubone et al. as applied to claims 1-4, 8-12, 14 and 16 above in view of Japanese Patent No. 09064144 to Uryu et al.
- 18. Tsubone et al. disclose the invention substantially as claimed and as described above, including a pair of buffer mounting tables (Figure 2, attached to 10) installed in the transport chambers.
- 19. However, Tsubone et al. fail to teach a loading/unloading port onto which a cassette vessel containing a plurality of treatment objects is placed.
- 20. Uryu et al. teach providing a loading/unloading port (Figure 1, left side of 1) onto which a cassette vessel (11) is provided for the purpose of temporary storage between conveyance

10/505,168 Art Unit: 1792

to/from the cassette and common transfer chamber (right side of 1) with a positioning mechanism (13) and a processing chamber.

- 21. It would have been obvious to one of ordinary skill in the art at the time the Applicant's invention was made to have provided a loading/unloading port in Tsubone et al. along with a common transfer chamber for the purpose of temporary storage between conveyance to/from the cassette and to/from the combined transfer chamber and processing chamber as taught by Uryu et al.
- 22. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tsubone et al. as applied to claims 1-4, 8-12, 14 and 16 above, and further in view of French Patent Publication No. 2677112A to Dessert.
- 23. Tsubone et al. disclose the invention substantially as claimed and as described above.
- 24. However, Tsubone et al. fail to teach that a rechargeable pump power source is provided for the exhaust source of the vessel main body.
- 25. Dessert teaches providing a rechargeable power source for a vacuum pump for the purpose of providing recharging on site thus avoiding expensive return visits to a base workshop (abstract).
- 26. It would have been obvious to one of ordinary skill in the art at the time the Applicant's invention was made to have provided a rechargeable power source for the vacuum pumps of Tsubone et al. in order to provide onsite recharging and thus avoid return visits to a base workshop as taught by Dessert.

10/505,168 Art Unit: 1792

Response to Arguments

- 27. Applicant's arguments filed 15 October 2007 have been fully considered but they are not persuasive.
- Regarding claim 1, Applicant argues that Tsubone does not explicitly disclose an 28. openable/closable exhaust port in the vessel main body. Examiner responds by pointing out that this is not what the disclosure has been relied upon as teaching. Rather, Tsubone teaches that in general exhaust means (such as the openable/closable exhaust means connected to lock chamber 6a/b) can be connected to other structures (in this case the vessel main body 4) in order to allow them to be independently evacuatable. This is the context in which Tsubone was relied upon. Examiner does not submit that Tsubone discloses a specific embodiment with an openable/closable exhaust port in the vessel main body, but suggests the suitability of such a feature. It is further noted in response to this particular argument that the courts have ruled that the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).
- 29. Regarding claims 2 and 3, the same reasoning for combination, as described above, is relevant.

10/505,168 Art Unit: 1792

- 30. In response to Applicant's arguments regarding the rejection of claims 5 and 6, the pair of buffer mounting tables (10) in Tsubone are capable of being installed in the transport auxiliary chambers when they transfer a specimen from the vessel body transfer unit to the transport auxiliary chambers, before being transferred by the transport arm mechanism into the processing chamber.
- 31. With respect to claim 13 and the use of Dessert, where Applicant argues that Dessert is non-analogous art, Examiner disagrees. Dessert is concerned with and addresses the recharging of a vacuum source, as does the claimed invention. It has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, as noted above, the disclosure of Dessert is reasonably pertinent to the particular problem with which Applicant is concerned.

Conclusion

32. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

10/505,168 Art Unit: 1792

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karla Moore whose telephone number is 571.272.1440. The examiner can normally be reached on Monday-Friday, 9:00 am-6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Parviz Hassanzadeh can be reached on 571.272.1435. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private

PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KARLA MOORE PRIMARY EXAMINER

3 January 2008